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(FILE 'HOME' ENTERED AT 14:17:03 ON 26 APR 2006)

FILE 'MEDLINE, AGRICOLA, BIOSIS' ENTERED AT 14:17:18 ON 26 APR 2006

L1 3115391 S PLANT
L2 3474980 S DNA OR GENE OR POLYNUCL?
L3 1226032 S TRANSFOR? OR TRANSFECT? OR RECOMBIN? OR BIOLISTIC OR AGROBACT
L4 22 S GOS2
L5 279511 S PROMOTER
L6 13 S L4 AND L3
L7 7 DUP REM L6 (6 DUPLICATES REMOVED)

=> type l7 1-7 all

L7 ANSWER 1 OF 7 MEDLINE on STN
AN 2001461223 MEDLINE
DN PubMed ID: 11506359
TI Glucocorticoid-inducible gene expression in rice.
AU Ouwerkerk P B; de Kam R J; Hoge J H; Meijer A H
CS Institute of Molecular Plant Sciences, Leiden University, Clusius
Laboratory, The Netherlands.
SO Planta, (2001 Jul) Vol. 213, No. 3, pp. 370-8.
Journal code: 1250576. ISSN: 0032-0935.
CY Germany: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-AF294979; GENBANK-AF294980; GENBANK-AF294981; GENBANK-AF294982
EM 200206
ED Entered STN: 20 Aug 2001
Last Updated on STN: 25 Jun 2002
Entered Medline: 24 Jun 2002
AB We have studied the use of a glucocorticoid receptor-based inducible gene
expression system in the monocotyledonous model plant rice (*Oryza sativa*
L.). This system, originally developed by T. Aoyama and N.-H. Chua
[(1997) Plant J 11: 605-612], is based on the chimaeric transcriptional
activator GVG, consisting of the yeast Gal4 DNA-binding domain, the VP16
activation domain and the glucocorticoid receptor domain. For application
in rice, we designed an optimized binary vector series (pINDEX) and tested
this with the beta-glucuronidase (*gusA*) reporter gene. GUS expression was
tightly controlled and relatively low concentrations (1-10 microm) of the
glucocorticoid hormone dexamethasone (DEX) were able to induce GUS
activities to levels comparable to those conferred by the strong
cauliflower mosaic virus (CaMV) 35S promoter. DEX was taken up
efficiently by the roots of tissue-cultured plantlets or mature plants in
hydroponic culture, and induced GUS activity throughout the whole plant.
DEX-induced GUS expression patterns were consistent in all lines and their
T1 progeny. The phenotype of tissue-cultured rice plantlets was not
affected when inductions with 10-100 microm DEX were limited to 1-4 days
or when 2-week inductions were performed with 1 microm DEX, which was
already sufficient to reach near-maximal GUS activity. However, 2-week
inductions with 10 microm DEX caused growth retardation and developmental
defects. As the severity of these effects varied between different lines,
we could select lines with a mild phenotype for future use as activator
lines in crosses with 'target' plants.
CT Base Sequence
*Cloning, Molecular: MT, methods
DNA-Binding Proteins: BI, biosynthesis
*Dexamethasone: PD, pharmacology

10/541.315
4/24/06
BOD

WEST Search History

Hide Items	Restore	Clear	Cancel
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DATE: Wednesday, April 26, 2006

Hide?	Set Name	Query	Hit Count
		<i>DB=PGPB,USPT,DWPI; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L9	L8 or l7	14
<input type="checkbox"/>	L8	inze-dirk.in.	13
<input type="checkbox"/>	L7	hatzfeld-yves.in.	3
<input type="checkbox"/>	L6	l1 adj3 l3	24
<input type="checkbox"/>	L5	(l1 or l2) adj5 l3	1046
<input type="checkbox"/>	L4	(l1 or l2) and l3	14519
<input type="checkbox"/>	L3	promoter	160705
<input type="checkbox"/>	L2	rice	127198
<input type="checkbox"/>	L1	gos2	101

END OF SEARCH HISTORY

10/541, 315
4/26/06
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